**To:** Mahmud, Shahid[Mahmud.Shahid@epa.gov]

From: Hathaway, Ed

Sent: Sat 8/15/2015 9:05:22 PM Subject: RE: inspection thoughts

You can use it however you wish. It meant to be an outline that would be adapted as the discussion unfolds.

The Gold King issue reinforces the outcome of the surveys and the Superfund review. There are no quick, cheap, easy fixes for mining sites. They are complicated, have challenging problems, and need to be done carefully (which they may have done). The outcome of the study is that we need to redefine our measures of success, allow credit for all the good work and success in reducing exposures, reducing loads, restoring acres and stream miles, and protecting individuals and ecological receptors. We also need a way to test technologies in a manner that still allows for credit for progress so we can hopefully prove out some of the "promising" innovative technologies because even if we control the flow from the adit, we still need to treat the water.

Ed

From: Mahmud, Shahid

Sent: Saturday, August 15, 2015 3:48 PM

To: Hathaway, Ed

Subject: Re: inspection thoughts

Ed,

These are really good questions! Can I share these with others on the group? Thanks!

Shahid Mahmud Team Leader EPA Abandoned Mine Lands Team 703-603-8789 From: Hathaway, Ed Sent: Saturday, August 15, 2015 3:37 PM To: Mahmud, Shahid Subject: inspection thoughts Shahid, I feel bad that I cannot assist you. I have so much work ongoing this summer it has been crazy - too much work. Almost all this work has to come together in the next few weeks so I would not be able to meet those obligations in addition to my inspections and public meeting this week if I were to travel. I put together some thoughts that I would have used as a rough guide/outline. All of this could change once on the ground and having discussed the site with the Region 8 folks. Not sure if it is helpful but I thought I would share this. I will be signing off for a while now. Best regards, Ed